

injecting fluorine into a region of a semiconductor substrate other than a region of the semiconductor substrate where a thinnest gate insulting film is to be formed, among a plurality of regions where gate insulating films are to be formed;

oxidizing the semiconductor substrate with fluorine injected therein to form an oxide film in said plurality of regions; and

nitriding an exposed surface of said oxide film to turn an exposed surface layer thereof into an oxynitride film or to form a nitride film on the exposed surface of said oxide film.--

[Amend claim 2 as follows:]

--2. (amended) A method according to claim 1, wherein said step of injecting fluorine comprises the step of:

setting conditions for injecting fluorine such that the gate insulating films formed on said semiconductor substrate have a thickness difference of at least 0.2 nm.--

Amend claim 4 as follows:

--4. (amended) A method of manufacturing a semiconductor device having a plurality of gate insulating films of different thicknesses on a semiconductor substrate, comprising the steps of:

forming a first oxide film on a surface of a semiconductor substrate;

removing said first oxide film from regions of the semiconductor substrate other than a region of the semiconductor substrate where a thickest gate insulating film is to be formed, among a plurality of regions where gate insulating films are to be formed;

injecting fluorine into the region other than the region where a thinnest gate insulating film is to be formed, among the regions of the semiconductor substrate from which said first oxide film has been removed;

oxidizing the semiconductor substrate with fluorine injected therein to form a second oxide film in said plurality of regions; and

nitriding an exposed surface of said second oxide film to turn an exposed surface layer thereof into an oxynitride film or to form a nitride film on the exposed surface of said second oxide film.--

[Amend claim 5 as follows:]

--5. (amended) A method according to claim 4, wherein said step of injecting fluorine comprises the step of:

setting conditions for injecting fluorine such that the gate insulating films formed on said semiconductor substrate have a thickness difference of at least 0.2 nm.--

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Amend claim 7 as follows:

--7. (amended) A method of manufacturing a semiconductor device having a plurality of gate insulating films

of different thicknesses on a semiconductor substrate, comprising the steps of:

forming a first oxide film on a surface of a semiconductor substrate;

forming a first polysilicon film on a surface of said first oxide film;

removing said first polysilicon film and said first oxide film from regions of the semiconductor substrate other than a region of the semiconductor substrate where a thickest gate insulating film is to be formed, among a plurality of regions where gate insulating films are to be formed;

injecting fluorine into the region other than the region where a thinnest gate insulating film is to be formed, among the regions of the semiconductor substrate from which said first polysilicon film and said first oxide film have been removed;

oxidizing the semiconductor substrate with fluorine injected therein to form a second oxide film in said plurality of regions;

nitriding an exposed surface of said second oxide film to turn an exposed surface layer thereof into an oxynitride film or to form a nitride film on the exposed surface of said second oxide film;

forming a second polysilicon film on an exposed surface of said oxynitride film or an exposed surface of said nitride

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